AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in the application:

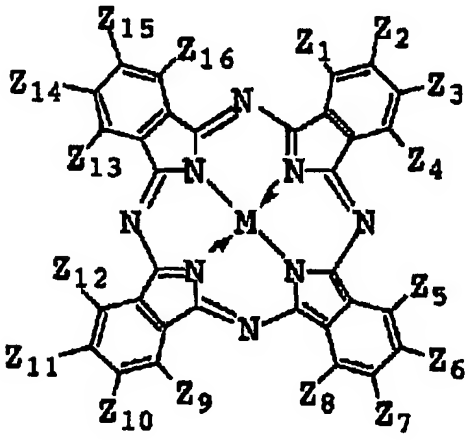
1. (Original) An optical sensor comprising: a substrate having an electrode; a photodetector electrically connected to the electrode; and a light-transmissive resin encapsulating portion for encapsulating the photodetector on the substrate, the optical sensor characterized by further comprising an infrared-blocking layer either inside the light-transmissive resin encapsulating portion or on an outer surface of the light-transmissive resin encapsulating portion for blocking infrared radiation from the outside from reaching the photodetector.

2. (Original) An optical sensor comprising: a substrate having an electrode; a photodetector electrically connected to the electrode; and a light-transmissive resin encapsulating portion for encapsulating the photodetector on the substrate, the optical sensor characterized in that the light-transmissive resin encapsulating portion contains an infrared-absorbing substance.

3. (Original) The optical sensor as set forth in claim 1, wherein the infrared-blocking layer is formed on the outer surface of the light-transmissive resin encapsulating portion and is either an infrared-absorbing layer containing an infrared-absorbing substance or an infrared-reflecting layer containing an infrared-reflecting substance.

4. (Original) The optical sensor as set forth in claim 1, wherein the light-transmissive resin encapsulating portion has an inner resin portion for encapsulating the photodetector and an outer resin portion for covering the inner resin portion and wherein the infrared-blocking layer is interposed between the inner resin portion and the outer resin portion and is either an infrared-absorbing layer containing an infrared-absorbing substance or an infrared-reflecting layer containing an infrared-reflecting substance.

5. (Currently Amended) The optical sensor as set forth in ~~any one of claims~~claim 2 ~~to 4~~, wherein the infrared-absorbing substance is a phthalocyanine compound represented by the general formula (I):



(I)

wherein Zi (i=1-16) is SR_1, OR_2, NHR_3 or a halogen atom, wherein R_1, R_2 and R_3 are a phenyl group which may have substituent(s), an aralkyl group which may have substituent(s) or a C_1-C_{20} alkyl group which may have substituent(s); and M is a nonmetal, a metal, a metallic oxide or a metallic halide.

6. (Currently Amended) The optical sensor as set forth in ~~any one of claims~~claim 1 ~~to 5~~, further comprising a light-shielding frame for covering all the outer surfaces of the light-transmissive resin encapsulating portion except an outer surface thereof on a light-receiving surface side of the photodetector.

7. (Currently Amended) The optical sensor as set forth in ~~any one of claims~~claim 1 ~~to 6~~, wherein the transmittance of the light-transmissive resin encapsulating portion in the visible-light region is substantially constant in the range of blue light (450 nm) to red light (650 nm).

8. (Currently Amended) The optical sensor as set forth in ~~any one of claims~~claim 2 ~~to 7~~, containing two or more different infrared-absorbing substances.

9. (Original) The optical sensor as set forth in claim 8, wherein the two or more different infrared-absorbing substances are phthalocyanine compounds having absorption peaks at different infrared wavelengths.

10. (Original) The optical sensor as set forth in claim 9, wherein the infrared-absorbing substances are phthalocyanine compounds having absorption peaks in the range of wavelengths of 750 nm to 1000 nm.

11. (Currently Amended) The optical sensor as set forth in ~~any one of claims~~claim 1

~~to 10~~, wherein the photodetector is a Si phototransistor.

12. (Original) A process of producing an optical sensor, comprising the steps of: electrically connecting a photodetector to an electrode provided on a substrate; and forming a light-transmissive resin encapsulating portion on the substrate so that the photodetector is entirely encapsulated in the light-transmissive resin encapsulating portion, the process characterized in that the step of forming the light-transmissive resin encapsulating portion includes the step of forming an infrared-blocking layer either inside the light-transmissive resin encapsulating portion or on an outer surface of the light-transmissive resin encapsulating portion for blocking infrared radiation from the outside from reaching the photodetector.

13. (Original) A process of producing an optical sensor, comprising the steps of: electrically connecting a photodetector to an electrode provided on a substrate; and forming a light-transmissive resin encapsulating portion on the substrate so that the photodetector is entirely encapsulated in the light-transmissive resin encapsulating portion, the process characterized in that in the step of forming the light-transmissive resin encapsulating portion, the light-transmissive resin encapsulating portion is formed of a transparent resin containing an infrared-absorbing substance.

14. (Original) The process of producing an optical sensor as set forth in claim 12, wherein the step of forming the infrared-blocking layer includes forming, on the outer surface of the light-transmissive resin encapsulating portion, either an infrared-

absorbing layer containing an infrared-absorbing substance or an infrared-reflecting layer containing an infrared-reflecting substance.

15. (Original) The process of producing an optical sensor as set forth in claim 12, wherein the step of forming the resin encapsulating portion includes the steps of: forming an inner resin portion for encapsulating the photodetector; forming the infrared-blocking layer for covering an outer surface of the inner resin portion with either an infrared-absorbing layer containing an infrared-absorbing substance or an infrared-reflecting layer containing an infrared-reflecting substance; and forming an outer resin portion for covering an outer surface of either the infrared-absorbing layer or the infrared-reflecting layer.

16. (Currently Amended) The process of producing an optical sensor as set forth in ~~any one of claims~~claim 12 ~~to 15~~, further comprising the step of forming a light-shielding frame for covering all the outer surface of the light-transmissive resin encapsulating portion except an outer surface thereof on a light-receiving surface side of the photodetector, the step of forming the light-shielding frame being carried out before the step of forming the resin encapsulating portion.

17. (Currently Amended) The process of producing an optical sensor as set forth in ~~any one of claims~~claim 12 ~~to 16~~, wherein the step of forming the resin encapsulating portion comprises: holding the substrate, having a plurality of said photodetectors mounted thereon, between an upper mold and a lower mold, the upper mold having, in

correspondence with the photodetectors, a plurality of recesses to be used for formation of the light-transmissive resin encapsulating portion; pouring a light-transmissive resin into the recesses inside the mold; and then curing the resin thereby to form the resin encapsulating portions.

18. (Original) A light-transmissive resin composition both for an optical sensor filter and for encapsulating a photodetector of an optical sensor, the light-transmissive resin composition having an infrared radiation blockage function provided by addition of a plurality of phthalocyanine dyes as infrared-absorbing substances to a light-transmissive resin.